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LETTER TO THE EDITOR

The application of urinary antigen test score in *Pneumococcal pneumonia* in children

Streptococcus pneumoniae is the most common pathogen of bacterial pneumonia in children.[1] The difficulty in acquiring good quality of sputum samples has been a major issue of pathogenic identification. Therefore, urine pneumococcal antigen test becomes a fast and feasible tool for diagnosis. However, high prevalence of pneumococcal colonization hinders its application in young children comparing to which in adult patients.[2] Shen et al[3] proposed a urinary antigen test score to correlate with the severity of pneumococcal pneumonia in children. The results showed faster and greater enhancement of urinary antigen test was associated with severe symptoms. Although the report is inspiring, there are two issues to be addressed. First, the detection rate of urine pneumococcal antigen test increases in concentrated urine samples.[4] In this study, the authors did not delineate the time when the urine antigen tests were performed and the concentration of each corresponding urine samples. It was difficult to clarify whether the faster and darker response of antigen test was due to the larger bacterial load in severe cases or was caused by more concentrated urine sample at the time point of collection. Second, the cases with underlying illness in this study apparently had diverse degree of severity. A case of cerebral palsy with impaired mobility may have greater chances predisposing pulmonary infection and experiencing more complicated course of illness compared with a child of diabetes mellitus with uneventful medical history. It would be better to spare the data of the cases with prior conditions from the study or to explain that the pulmonary function of these patients was in similar status. Nevertheless, the merit of this study is proposing the relationship between bacterial load and the severity of pneumococcal pneumonia in children. Future efforts are required to pursue a more efficient and reliable diagnostic tool.

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